



US 20140198122A1

(19) **United States**(12) **Patent Application Publication**
Grossman(10) **Pub. No.: US 2014/0198122 A1**(43) **Pub. Date: Jul. 17, 2014**(54) **ENGINE FOR STREAMING VIRTUAL
TEXTURES**(52) **U.S. Cl.**CPC *G06T 11/001* (2013.01)USPC **345/582**(71) Applicant: **MICROSOFT CORPORATION**,
Redmond, WA (US)(72) Inventor: **Mark Grossman**, Palo Alto, CA (US)(73) Assignee: **MICROSOFT CORPORATION**,
Redmond, WA (US)(21) Appl. No.: **13/741,735**(22) Filed: **Jan. 15, 2013****Publication Classification**(51) **Int. Cl.**
G06T 11/00

(2006.01)

(57) **ABSTRACT**

An engine decompresses texture data belonging to a virtual texture stored in processor readable memory so that decompressed texture data may be used to update a selected sub-image of a large texture image used to render a CGI. The updated sub-image may be at any location in the larger texture image. A processor executes an application to provide control information to the engine. The control information may include commands to decode compressed texture data at source addresses and provide a stream of decompressed virtual texture data to selected sub-image destination addresses in a texture buffer used for rendering a CGI. Similarly, the engine may compress texture sub-image information and store the compressed result at a destination address.

